

Craighead Environmental Research Institute

Monthly Progress Report: December 2008

for the Montana Department of Transportation and Western
Transportation Institute

Bozeman Pass Wildlife Monitoring

MSU banner number 426899

1 December 2008 – 31 December 2008

Task 1: Road Kill Surveys during December 2008

Road kill surveys were conducted between Bozeman and Jackson Creek. Surveys were conducted on both sides of I-90 from Bozeman to Jackson Creek and back for a total of 22 miles round trip and an estimated 1 hour of labor per survey. Fourteen (14) road-kill surveys were driven during December of 2008. Eight (8) of those recorded no new road-kill. This equals 308 miles driven in December for this subcontract. Totals of animals killed between Bozeman and Livingston were:

Bozeman Pass Roadkill Totals	December
Species	Number
Badger	0
Beaver	0
Bobcat	0
Bird Spp.	0
Black Bear	0
Cowbird	0
Coyote	0
Crow	0
Deer species	1
Dog	0
Domestic cat	0
Elk	0
Great Horned Owl	1
Ground Squirrel	0
Harrier	0
Hungarian (Gray) Partridge	0
Long-eared Owl	0
Magpie	0
Mallard	0

Marmot	0
Meadowlark	0
Mink	0
Moose	0
Mule Deer	0
Pigeon	0
Porcupine	0
Rabbit	0
Raven	0
Raccoon	0
Red Fox	0
Ruffed Grouse	0
Snowshoe Hare	0
Skunk	1
Small mammal spp.	0
Weasel	0
White Tail Deer	7

Task 2: Track bed monitoring at the MRL Bridge in December 2008

No track bed sessions were completed in December. The weather was generally too cold and the track bed was frozen. Track bed sessions will resume in the spring.

Task 3: Photo monitoring at fence ends through December 2008

Cameras were downloaded on January 2. Batteries for these fence-end remote cameras were operational. No identified large animal occurrences were photographed in December at the SE fence end or at the NE fence end.

The camera mounted at the western fence end under the I-90 bridge that spans Bear Canyon road was downloaded on December 9. Since the last download on September 11 we recorded 58 white-tailed deer crossing under I-90 along the edge of the Bear Canyon road overpass. Many of the crossings fit into a regular pattern of moving south in the evening (around 7 PM) and north in the morning (5-7 AM). They may be spending the day in cover along Rocky Creek and crossing south of the highway to forage at night. It is likely that these animals would normally cross over the highway occasionally, but have been re-directed under the bridge by the wildlife fence. Two domestic cats and 7 bird events (magpies and pigeons) were also recorded.

Task 4: Photo monitoring at jump-outs through December 2008

Cameras at jump-outs were downloaded on December 9 and on January 2. They were previously downloaded on October 22. Between October 22 and December 9 the SE jump-out camera recorded 2 rabbits, 2 birds (magpie and robin) and 3 mouse events at the top of the jump-out. Two deer were recorded passing by the bottom of the jump-out outside the fence. No events were recorded between December 9 and January 2.

Between October 22 and December 9 the NE jump-out recorded 2 raccoons, 2 rabbits, 1 human, and 4 coyote events at the top of the jump-out. The coyote returned to the top of the jump-out 3 times before eventually jumping off. One deer was recorded passing by the bottom of the jump-out outside the fence. No events were recorded between December 9 and January 2.

Between October 22 and December 9 the NW jump-out recorded 4 deer and 1 mouse events. The 4 deer photos sessions were of the same deer returning to the jump-out and wandering around the area before leaving; it did not attempt to jump out. No events were recorded between December 9 and January 2.

Between October 22 and December 9 the SW jump-out did not record any animal events, but recorded 18 humans passing over the top of the jump-out (17 were CERI personnel checking cameras and track beds). No events were recorded between December 9 and January 2.

Task 5: Track bed monitoring at fence ends, jump-outs through December 2008

Monitoring of fence ends and jump-outs was discontinued in December because of mostly cold conditions and frozen track beds.

Task 6: Photo monitoring of culverts December 2008

The culvert cameras were not downloaded in December. On December 8 a camera was deployed at the livestock crossing culvert near the MSU Fort Ellis experimental farm near Milepost 311. On December 12 a camera was deployed at the livestock crossing culvert near milepost 329.5. On January 2 a camera was deployed at the livestock crossing culvert near milepost 329.8. To date, no wildlife have been observed using these culverts.

Task 7: Opportunistic snow tracking at track bed, fence ends, jump-outs, and along the Interstate in December 2008.

One opportunistic snow tracking session was conducted on Dec. 9 at the track bed and jump-outs. 24 hours after new snow had fallen there were no tracks under the MRL bridge or on any of the jump-outs.

Task 8: Data Management & Reporting in December 2008

Data entry and summary required two hours during December.

Discussion:

A large number of deer crossing events were recorded under the Bear Canyon road bridge between September 11 and December 9. At least 4 different individuals were recognizable (one male, one single female, and one female with a fawn). It may be that more animals are learning the new route around the end of the fence and under the highway as time goes on.

There was relatively little roadkill in December compared to previous months. Cold and snowy conditions may have reduced animal movements, and frequent plowing may have removed some carcasses from the highway and covered them with snow before they were recorded. If so, many of these will be recorded as the snow melts during thaws.

An invoice was submitted with this report for December expenses and activities. Currently the cumulative total billed to this project is \$ 27,212.84.